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CHANGE IN ORGANIZATIONS CHAPTER 6 CREATING LONG-TERM

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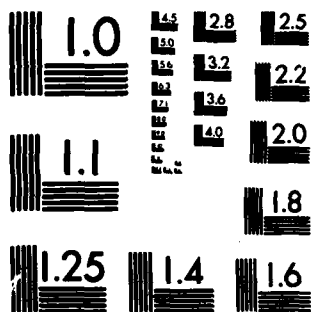
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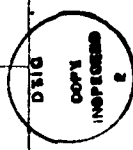
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Change In Organizations
 Chapter 6

Creating Long-Term Organizational Change



Paul S. Goodman
 James W. Dean, Jr.

→ This chapter is about the institutionalization of organizational change. It is concerned with the persistence of organizational change. Lewin (1951) describes change in terms of three processes—unfreezing, moving, and refreezing. Institutionalization is concerned with the process of refreezing. After a new policy or program is introduced into an organization, we plan to focus on factors that affect its persistence. A whole series of questions underlies this problem statement: What does institutionalization or persistence mean? How do we describe different degrees of institutionalization? What critical processes affect institutionalization? What are the critical predictors? These questions serve to organize this discussion.

In this, as in any study, it is important to limit the scope of inquiry. First, we will examine only the persistence of behavior within organizations. Persistence of individual behavior or social

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institutions (Meyer and Rowan, 1977) is excluded. Second, we will limit our inquiry to instances of planned organizational change. That is, we are interested only in the case in which some planned change is introduced by any of the organization's constituencies; changes emanating from random variation or maturation are excluded. Third, we will examine only cases in which the change was intended to be long term. There are many organizational situations where change is intended to be temporary or short run; these situations also are excluded.

Significance

If one is interested in creating long-term organizational change, an understanding of the processes that bring about this long-term change is critical. Unfortunately, a review of the literature indicates there are few, if any, well-developed models to explain or predict degrees of institutionalization (Goodman, Bazerman, and Conlon, 1979). This is not to say that there are not intellectual pieces that deal with the persistence of change. Berger and Luckman's (1966) concept of reciprocal typification, Granovetter's (1978) threshold concept, Kiesler's (1971) discussion of commitment, and Walton's (1980) human resource gap are just some of the ideas that bear on the persistence of change. Some of these references deal with definitions of institutionalization, some with processes that affect institutionalization, and some with predictors. Our focus is to develop a unified explanatory model that deals with degrees of institutionalization, processes, and predictors.

There has been a recent spurt of interest in the empirical literature in organizational failures (for example, Mirvis and Berg, 1977). Analyses of change programs' failures represent one way to look at reasons for persistence. Unfortunately, most of these research reports are ex post in their explanations, and those reports focusing solely on failures pick up only pieces of the puzzle. One needs to look at successes as well as failures in similar organizations in order to identify critical predictors. Our focus is to expand the success-failure dichotomy to examine degrees of institutionalization of planned organizational change. It is unlikely that the "success-failure" labels describe the persistence of change.

There are practical reasons for examining the concept of institutionalization. Over the last ten years there has been a proliferation of projects designed to improve overall organizational effectiveness. Many viewed these change efforts in a policy context, as they had potential for improving productivity and quality of working life at the national level. Many of these projects were bold and innovative. Unfortunately, the most optimistic "bottom line" is that these projects, although initially successful, often did not persist over time (Goodman, Bazerman, and Conlon, 1979; Mirvis and Berg, 1977; Walton, 1975, 1980). If organizational innovations and change are to represent one strategy for improving productivity and quality of working life, then we need to understand the forces that lead to long-run organizational change. Our orientation is not specifically toward large-scale productivity or "QWL" change projects, but toward any type of organizational change. The persistence of organizational change is a pervasive organizational problem. It is important in dealing with the introduction of new technology, new information systems (Keen, 1981), or new financial systems.

Chapter Organization and Orientation

The chapter is divided into two sections—a theory section and an empirical section. In the first section we will outline a definition and a framework for studying institutionalization and then detail the critical processes. In the second section we will present data from nine organizations that were included in a study of planned change. The information from these case studies can be used to illustrate degrees of institutionalization. Other studies on institutionalization will also be incorporated into this analysis.

The products of this chapter flow from an earlier work on institutionalization (Goodman, Bazerman, and Conlon, 1979). In that endeavor we constructed a framework for institutionalization and then presented a literature review organized around that framework. The next step was to use that framework for organizing data collected in the nine organizations. Both collection and analysis of these data provided new insights into the processes of institutionalization, which in turn led to revisions in our theoretical orienta-

tion. This chapter, then represents an evolution from our first effort and is more a product of both inductive and deductive processes.

Conceptual Framework

Institutionalization Defined. Institutionalization is examined in terms of specific behaviors or acts. We are assuming here that the persistence of change programs can be studied by analyzing the persistence of the specific behaviors associated with each program. For example, job switching is a set of behaviors often associated with autonomous work groups. To say that the behaviors associated with a program are no longer practiced is to say that the program no longer persists. An institutionalized act is defined as a behavior that is performed by two or more individuals, persists over time, and exists as a social fact (Goodman, Bazerman, and Conlon, 1979). Behavior as a social fact means that it exists external to any individual as part of social reality, that is, it is not dependent on any particular individual. An institutionalized act is a structural phenomenon. Persistence in the context of planned organizational change refers to the probability of evoking an institutionalized act given a particular stimulus and the functional form of that response rate over time. Persistence is not an all-or-nothing phenomenon; there are clearly degrees of persistence that can be identified in terms of response rates over time (Goodman, Bazerman, and Conlon, 1979).

The defining characteristics of an institutionalized act are *performance by multiple actors, persistence, and its existence as a social fact.*

Degrees of Institutionalization. An act is not all or nothing; it may vary in terms of its persistence, the number of people in the social system performing the act, and the degree to which it exists as a social fact. The problem in some of the current literature on change is the use of the words *success* or *failure*. This language clouds the crucial issue of representing and explaining degrees or levels of institutionalization. Most of the organizational cases we have reviewed cannot be described by simple labels of success or failure. Rather, we find various degrees of institutionalization. Indeed, an issue in collecting data about institutionalization is know-

ing how to operationalize this variation. That is, the problem in the field is not whether a change program persists, but how to represent the degree of its persistence. Although this problem confronted us in deciding how to measure institutionalization, its resolution is more conceptual than empirical.

The basic questions are, then: What do we mean by degrees of institutionalization? How do we represent these variations? Our conceptualization is based on the following five facets of institutionalization. The presence or absence of these facets explains the degree of institutionalization.

The first is knowledge of the behavior. Institutionalization is defined in terms of acts or behaviors. This facet focuses on the extent to which an individual has knowledge of a particular behavior. In other words, does the individual know enough about the behavior to be able to perform it and to know what to expect to happen if he or she does? For example, in several of the organizations in which we collected data, the change programs were directed toward the development of autonomous work groups. Within the label of autonomous work groups there is a wide range of new behaviors, such as job switching, and group decision making on bringing in new members, disciplining members, and planning work. Knowledge refers to the cognitive representations people have of these behaviors. Because institutionalization is a social construction of reality, we are interested in the extent to which there are common cognitive representations of each behavior among participants in the relevant social system.

The second facet is performance. In any change program there are new behaviors to be performed, given some common stimulus. One measure of the degree of institutionalization is the extent to which each behavior is performed across the participants in the social system. If job switching or intergroup communication were part of the intended change, we could look for the number of people performing the behavior as a measure of institutionalization. Behavior frequency might be another indicator, but there are certain cautions to keep in mind. In some change situations certain behavior may be low-frequency events. Failure to observe these behaviors at any point does not indicate they are not institutionalized. For example, in an autonomous work group, production decisions may be

made daily, but hiring decisions may be made very infrequently. Also, some behaviors may be displayed early in a change program, but their frequency may decline over time. This does not necessarily mean that they are less institutionalized. For example, one dimension of most autonomous work groups is that everyone learns all the other jobs via job switching, a change from the traditional one person-one job format. As a group moves from the traditional structure toward autonomy, there is bound to be a high frequency of switching if the program of change is accepted. Over time, as each person learns all the jobs, people remain on one job but now have the potential to work on other jobs, as in new work configurations. At this point the frequency of the job switching behavior has decreased. This, however, does not mean that the behavior is less institutionalized. The potential for job switching is still in place (that is, known and accepted by social system members), although the actual number of job switches has declined.

A similar problem concerns the evolution of behavior. A particular behavior may be set in place during the early phases of the change program, but it may evolve over time. In one account of an organizational intervention, Goodman (1979) reports that intershift communication was introduced to improve organizational effectiveness. The organizational participants adopted this behavior, and an observer would see each crew member from one shift talking to his counterpart from the next. During the second year of change, crew members talked to their counterparts only if there were production problems. Later, a crew appointed a representative to talk with the representative from the other crews during the shift changes. In this case not only the frequency of the behaviors declined, but the form of the behavior itself changed. Nonetheless, we cannot infer that the behavior is less institutionalized. The function of intershift communication is still being performed.

This discussion of the frequency and evolution of the behavior is important to illustrate the complexity of using behavior as a criterion of institutionalization. Simple frequency counts may not be a useful measure. Delimiting the range of acceptable responses to a stimulus (for example, shift time) is difficult. Unfortunately, there are no general rules for resolving these two issues. Basically, one has to be aware of the complexities of measuring behavior and perform

the analysis on a case-by-case basis. In regard to frequency, one should be able to hypothesize about differential behavior rates over different phases of change.

The third facet is preferences for the behavior, which refers to whether the participants like (or dislike) performing the behavior. We introduce this facet because we want to distinguish between private acceptance of a behavior and public performance of that behavior (compare Kiesler and Kiesler, 1969). Performance of a behavior may result from individual or group sanctions. In neither case would the performer privately accept the behavior or be positively disposed to it. We assume some level of private acceptance as reflected in positive dispositions as a necessary condition for institutionalization. The sign and intensity of these dispositions across the participants in a social system represent a way to operationalize this criterion.

The fourth facet is normative consensus. This criterion refers to the extent to which (1) organization participants are aware of others performing the requisite behaviors and (2) there is consensus about the appropriateness of the behavior. The wider the awareness that others are performing the behavior and the wider the consensus that the behavior is appropriate, the greater the degree of institutionalization.

This facet is a representation of social structure. It reflects the extent to which a new behavior has become part of the normative fabric of the organization. The first three criteria are aggregated individual phenomena.

The fifth facet is values. It refers to the social consensus on values relevant to the specific behaviors. Values are conceptions of the desirable, statements about how one ought or ought not to behave. Values are abstractions from more specific normative beliefs. Many of the change activities over the last decade have been based on values of providing people more control over their environment, more freedom and responsibility. The programs themselves have created specific opportunities or behaviors to express these values. The degree to which individuals generalize about these specific acts to endorse these or other values is an important facet of institutionalization. The critical factors for this criterion are the existence of

individual values and the awareness that others hold these same values.

The reason for postulating these five facets is to enable us to deal with the question of how to represent different levels of institutionalization. We do not view behaviors as either institutionalized or not, but in terms of degrees of institutionalization. Our use of the five facets is one way to represent the degree or level of institutionalization.

Because the concept of degrees of institutionalization is critical for subsequent analysis, some other distinctions about facets are needed. First, all five facets are analytically independent. Cognitions, behaviors, preferences, norms, and values are independent constructs. Second, there may be an order among the facets that reflects a unidimensional structure. Our argument is as follows: People probably have some cognitive representations of a behavior before it is performed. Performance of a behavior generates experiences, as well as rewards and punishments, that affect people's disposition toward that behavior. As many people perform the behavior, they become aware of others' performance, which leads to consensus about the appropriateness of the behavior. If there is normative consensus about a class of behaviors that reflects a particular value, over time we expect some consensus on that value among organizational participants. Or, stating the obverse, if a new value consensus emerges over time, we would expect that value to be derived from a set of normative behaviors. The normative consensus in turn depends on the private acceptance of that behavior, which in turn reflects experiences from the performance of that behavior. The facets are therefore ordered: knowledge, performance, preferences, norms, and values. We would not expect an act to meet one of the latter criteria without meeting all of those that precede it. This thesis about the structure of the criteria is based on a developmental view of institutionalization that is elaborated in the Appendix to this chapter. Basically, we view the organization in some equilibrium state. Initially, change is introduced primarily through cognitive means (for example, *communication*). Initial impacts are on individuals' cognitions, behavior, and preferences. Over time, collective awareness and reinforcements lead to normative and value consensus.

A third issue concerns whether we could be more parsimonious with our facets of institutionalization. Given that our definition requires that the behavior be a social fact and that facets four and five are social facts, why could we not use only these two? It is true that the first three facets are more necessary conditions for institutionalization. It could be that all members of a social system have cognitions about a behavior, perform that behavior, and prefer that behavior, and still we would not label that behavior institutionalized.

The argument for using all five criteria is better to understand the process by which behaviors become fully institutionalized, as well as deinstitutionalized. The process is critical. We want to trace through the process by which behaviors become institutionalized or deinstitutionalized. The first three facets can provide better understanding about why a behavior becomes institutionalized. Similarly, changes in cognition, behavior, and preference can contribute to deinstitutionalization. Conceptually or empirically identifying degrees of institutionalization is a complex task. Including facets one through three (which are necessary conditions for institutionalization, not definitions) with facets four and five provides a sharper set of analytical tools to identify degrees of institutionalization. Institutionalization occurs only when facets four (norms) and/or five (values) are in place—meaning that these two facets are part of our definition. All five facets are used to examine the developmental process of institutionalization.

A fourth issue concerns the specification of the set of behaviors used to determine degrees of institutionalization. How do we identify the relevant behaviors to examine the degree of institutionalization? Most change activities have multiple behaviors, some intended, others unintended. The problem is further complicated by the dynamic aspect of change where behaviors continually evolve. If we do not specify the right set of behaviors, we cannot assess the degree of institutionalization. If we assess the degree of institutionalization in terms of five behaviors when the actual set is ten, we would misspecify the level of institutionalization.

There is no easy prescription for this problem. In our earlier work (Goodman, Bazerman, and Conlon, 1979) we addressed this by understanding the model of the change agent and the constituencies

supporting the change, as well as the target population. Such an analysis of characteristics of the change activity should shed light on the modal behaviors.

The last issue concerns identification of the relevant social system for measuring degrees of institutionalization. One way to measure institutionalization is the *extent* to which (1) people are aware of others performing behavior and (2) there is consensus about the appropriateness of the behavior. The measure of "extent" requires delineation of the appropriate social system. If the system is misspecified, the assessment of institutionalization will be incorrect. The basic problem is in identifying whether the change should be defined at the subsystem or system level. If the degrees of institutionalization are measured at the subsystem level but the system level is more appropriate for analysis, the assessment of institutionalization will be incorrect. Again, knowledge of the model of the change, the constituencies' views of the change, and observing the process should permit the appropriate identification.

General Framework. Now that we can represent the degree or level of institutionalization, our attention turns to the explanation of this phenomenon. We start with the degree of institutionalization represented by the five facets. Our picture is intentionally simple. For examples, we focus on two behaviors—A and B. A is fully institutionalized in that everyone understands the behavior, performs it, prefers it, and acknowledges that it is held by others, deemed appropriate, and represented by broader value. Although behavior B is understood by all, it is performed by a minority, is not well liked, and exhibits no broad normative consensus. Hence B is less well institutionalized. The question is why we find differences in the degree of institutionalization.

The main independent variables are a set of processes. These have a direct effect on the five institutionalization facets. The processes include

1. **Socialization.** A broad category, socialization includes transmission of information to organizational members about the requisite behaviors and learning mechanisms within individuals that affect the interpretation of information.

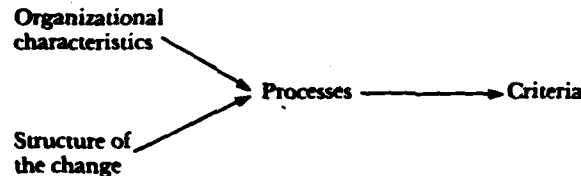
2. *Commitment.* Commitment refers to the binding of the individual to behavioral acts. It is a function of the degree of explicitness or deniability of an act, the revocability of the act, whether the act was adopted by personal choice or external constraints, and the extent to which the act is known by others (Kiesler, 1971; Salancik, 1977).
3. *Reward allocation.* Reward allocation refers to the types of rewards related to the behaviors as well as the schedule of their distribution. The allocator could be a proponent or an opponent of the change, and rewards can be allocated to individuals or groups.
4. *Diffusion.* Diffusion refers to the extension and adoption of a new work behavior into a new social system (compare Rogers and Shoemaker, 1971). That is, it concerns the spread of forms of work organization from one setting to another.
5. *Sensing and recalibration.* Sensing and recalibration refers to the processes by which the organization can measure the degree of institutionalization, feed back information, and take corrective action. One of the major themes from our research on institutionalization is that most of the organizations we visited had no mechanism to sense the degree to which their change programs were in place. Therefore, they had no ability to take corrective actions.

Two other classes of variables are incorporated in our framework. The first refers to the *structural aspects of change*. The goals of the change and critical roles (for example, autonomous work groups, survey feedback, team building, and so forth) represent features of the structural aspects of change.

The second category refers to the *characteristics of the organization*. These represent the social context in which the change is introduced and evolves. Existing values, norms, character of labor-management relationships, and skills of the work force all represent factors in this category. (See Figure 1.)

Our framework reflects two assumptions. First, the processes have a direct effect on the facets of institutionalization. Second, the structure of the change and the characteristics of the organization have indirect effects on the criteria through the processes. That is,

Figure 1. A Simple Model of Variables Related to Institutionalization.



the two structural categories serve as moderators of the change process.

We intentionally have drawn a simple framework in Figure 1; there are no complicated feedback loops to represent the dynamic features of change. Rather, we wanted to create a general map to understanding institutionalization. In the following section further detail will be provided to produce a more "fine grained" understanding of the concept.

Theoretical Processes of Institutionalization

Our focus is on the persistence of change; so we will not consider here the introduction and initial adoption phases of a change program. Our analysis begins with the following general assumptions about the state of the program: Some individuals have adopted the behaviors. These individuals have progressed through the first three degrees of institutionalization. They have some knowledge about the behaviors; they have performed them; and they have some feelings or preferences concerning the behaviors. Others have not adopted the behaviors. They are at the very first stage of institutionalization, that is, they probably have some knowledge of the behaviors. A third group of individuals has entered the organization or department after the change program was introduced. They may have some knowledge of the behaviors, but they have not performed them. Our explanation of the processes of institutionalization will detail the effects of the five processes on these three groups of individuals. To the extent that the processes move them from lower to higher degrees of institutionalization, the change program will be institutionalized.

Socialization. Socialization refers to the transmission of information about beliefs, preferences, norms, and values with respect to the new organizational form. In most discussions of change, socialization plays a major role during the initial introduction phase. However, our interest is in maintaining change over time. In this context, there are two targets for socialization: existing organizational members and new entrants. New forms of work behavior often involve concepts that are both abstract and complex (for example, autonomy). As these concepts often evolve throughout the change program, a continual process of focusing attention on them and their enduring meaning seems a necessary condition for developing higher levels of institutionalization. Failure to resocialize may lead to a decline in beliefs, behaviors, and preferences and hinder the development of norms and values.

A more critical target is the new organizational members. Organizational life is characterized by a continual procession of people through positions. Failure to socialize these individuals formally into the new work behaviors is a major cause of deinstitutionalization. If there is an increasing number of nonparticipants (that is, unsocialized new members), the percentage of those performing the behavior will decline, and the costs of not participating might decline. Granovetter (1978) has argued that as the number of individuals participating in a social act declines, the potential penalty for not participating will also decline, which in turn reduces the number who are participating. Also, there may be more similar others who are not performing the behaviors. This might stimulate social comparison, which would also induce decline. That is, as more similar others decline to participate, the social legitimation for participation also declines. An important determinant of institutionalization is the transmission of knowledge, beliefs, norms, and values across generations. This transmission is critical not only because of the passing of information. *The act of transmission itself* reaffirms validity of that knowledge, those beliefs, and those values. This reaffirmation should both maintain and enhance the level of institutionalization. If old members socialize the new members, the new members will also see that the old members consider the behavior appropriate, thus facilitating norm development.

Commitment. The process of commitment is important to all three of the groups involved in the change. For older members who have adopted the behavior, multiple opportunities for recommitment should be made available, thus enabling this commitment to be strengthened and leading to the development of norms and values. It is also necessary to be careful that those older members who have not adapted do not become committed to *not* performing the behavior. This might happen if they were somehow forced to make explicit public statements that they do not intend to adopt the behavior. This should be avoided because it would make it less likely that these individuals would ever adopt. Finally, commitment opportunities, in which they may select the behavior freely (not as an organizational requirement), explicitly, and in public, should be provided to new members (Salancik, 1977). This generates high commitment, which will lead to stability of change and resistance to change in that behavior.

Another dimension of commitment is the degree to which it exists throughout the total organizational system. Using the hierarchy as one way to represent an organization, we would examine the extent to which participants of all levels were committed to the new form of work behavior. Our basic hypothesis is the greater the total system's commitment, the higher the degree of institutionalization.

Reward Allocation. Reward allocation is another critical process of institutionalization. Three issues seem important. First, the nature of the reward schedule over time should have an effect on the level of institutionalization. The distribution of similar rewards over time may be correlated with declining values. Using a simple adaptation paradigm, we might expect that the attractiveness of rewards, such as variety or pay, may gradually decline over time. This raises another issue concerning the mix of rewards. It may be that the mix of rewards (for example, extrinsic and intrinsic) would impact on the level of institutionalization. If different types of rewards exhibit different functional forms between amount allocated and degree of attractiveness (Alderfer, 1972), then the type of reward should affect the attractiveness of performing a new form of behavior and, hence, the level of institutionalization. Implicit in this dis-

cussion of issues one and two is that the effects of reward systems are not constant over time. In particular there may be a need to revise these systems to maintain the level of institutionalization.

The need to revise the reward system depends to some extent on the degree of crystallization of the critical norms and values that support the new forms of work organization. As the norms and values become more pervasive, the role of the explicit reward system may become less pronounced and less in need of revision.

A third issue concerns the degree of equity of the reward system. The acquisition of beliefs and preferences may be hampered by a system with identifiable inequities. Similarly, the development of norms and values is probably facilitated in a system with minimum levels of conflict (inequities) among the members. These issues principally apply to those who have already adopted the behavior.

Diffusion. Diffusion refers to the process by which innovations in one system are transferred to a new system. If change is introduced into a subsystem and the behavior becomes institutionalized, there is some question about the stability of this change within the large system. If the change is incongruent with some of the values, and with the normative preferences of the larger system, forces of counterimplementation may be evoked (Keen, 1981). There is evidence from change studies (for example, Walton, 1980) that these forces can undermine the levels of institutionalization in the target system. Diffusion represents a maintenance and growth strategy and serves two functions. First, by spreading the institutionalized behaviors into other subsystems, the area for counterimplementation strategies is decreased. Second, diffusion requires the affirmation (transmission) of the institutionalized behavior, which should reinforce all five facets.

An alternative to diffusion is to draw a barrier around the initial target system for change (Levine, 1980). This strategy may be viable in loosely coupled systems.

Sensing and Recalibration. We expect variation in the performance of institutionalized acts as well as in the knowledge preferences, norms, or values. Sources of the variation may be random, caused by permanent changes in the organization or environment, or evolutionary. One of the factors we have observed in our empiri-

cal cases is that rarely is there any sensing mechanism to measure this variation. Absence of any mechanisms prevents possibilities for recalibration. If forces initiate a process of deinstitutionalization and if no sensing mechanism exists, nothing will abate the decline. The role of sensing and recalibration is to activate the other process (for example, socialization), rather than directly affecting the five facets of institutionalization.

Processes and Antecedents

Before we move to some empirical data, some comments about the relationship between the two classes of antecedent variables and the processes are necessary. (See Figure 1.) The structure of change refers to the modal goals, strategies, tactics, and programs of change. These may vary over the different phases of the change. The basic hypothesis is that the structure of the change affects the processes, which in turn affect degrees of institutionalization. For example, change projects that develop very dependent relationships with external consultants probably will find it more difficult to maintain levels of institutionalization after the consultants leave because the projects will not have developed internal capabilities of resocialization, creation of new commitment opportunities, diffusion, and so forth. Sponsorship probably has a direct effect on the reward allocation process. The departure of a sponsor can change the level and type of reward, which may induce deinstitutionalization. We will trace similar relationships between the variables in this category and the processes in the next section.

The other class of antecedent variables—organizational characteristics—moderates the effect of the processes or the structure of change on the processes. For example, a high degree of environmental instability should affect the size and distribution of the work force. High work force stability should affect the ability to socialize new members into the new forms of work behaviors. Introduction of new behaviors that are at variance with employee skills or values increases the costs of performing these behaviors. We trace these and other effects in the following section, which presents data from our study and from previous work about degrees of institutionalization.

Data

Our theoretical discussion is a product of prior work (Goodman, Bazerman, and Conlon, 1979) and some empirical work we did for this chapter. Our strategy for the empirical work was to become immersed in some organizations that were at different levels of institutionalization in regard to a change effort. We hoped that the interaction between the prior theoretical work and data would generate new ways of thinking about institutionalization. Although in other cases we have argued for formal model testing (Goodman, Atkin, and Schoorman, 1982), in this case we are using data to generate ideas. We have also included in this section results of other research that is related to our model. We have provided a brief summary of the information we collected and its relationship to the previous theoretical discussions, as well as to the results of other studies.

Data were collected from nine organizations that had been involved in some major change effort generally focused on improving quality of working life and productivity. Because our sampling strategy determined the kinds of data we collected and subsequently our views on institutionalization, it is necessary to be explicit about the plan. First, we selected organizations involved in some substantial organizational change (*substantial* means that the change led to a modification in multiple organizational dimensions, such as authority, decision making, or communication). Second, we looked at organizations that were four to five years into their change effort. In all cases, many of the change activities were in place and some data on consequences (generally positive) were available. Therefore, we are not looking at organizations in which the change activities were initially blocked and never really got started. Third, we selected organizations in which there was documentation over the life of the change effort. Because we were taking only a brief snapshot, it was important to be able to understand the total historical context of the program. Fourth, we selected a sample that was heterogeneous in terms of type of organization, target population, and type of change. The nine firms are drawn from both the private and public sectors. Some are unionized; others are not. The target population ranges from primarily production workers to primarily managerial, with

varied mixes among blue-collar, white-collar, professional, and managerial workers.

Data were collected by interviews. The framework for the interview schedule was designed from our first essay on institutionalization (Goodman, Bazerman, and Conlon, 1979) and focused primarily on measures of the degree of institutionalization and predictors of degrees of institutionalization. Because the change activities were different across organizations, the schedule had to be changed to fit the setting. However, in all cases, we looked for criteria of institutionalization. Therefore, if we learned that a labor-management problem-solving team was part of the change, we developed questions concerning people's knowledge of the team's existence, its functioning, and its consequences. There are some common predictors of institutionalization, such as learning mechanisms used to socialize new members, reward allocation mechanisms, and sponsorship. Questions for these concepts were tailored to the specific site. For each organization, twenty-five to thirty hours of interviews were conducted, with time per interview ranging from thirty minutes to one hour and a half.

Before we examine some of the data on institutionalization, we will briefly review some characteristics of the change programs utilized in these different organizations.

Autonomous work groups were introduced into some of our organizations. Basically, these are self-governing groups organized by process, place, or product. There is a substantial shift in authority and decision making as the group takes over decision making on hiring, discipline, allocation of production tasks, and so forth. Most autonomous groups encourage job switching and pay is by knowledge rather than activities (Goodman, 1979).

Problem-solving hierarchies were another common form of change. In this type of program, a hierarchy of linked problem-solving groups is superimposed on the existing organizational structure. The groups are generally arranged following the current organizational structure, with lower level groups dealing with problems specific to their areas and higher level groups dealing with problems that cut across multiple organizational units. In our sample, these groups met regularly. Products from these groups include

work simplification, flextime projects and new performance appraisal systems.

One organization introduced a matrix organization with quality control circles. At the factory level, all work was organized by business teams that generally reflected products or processes. The team was located in one area, and its membership was composed of staff and line personnel at the exempt level. The matrix was created to be sure staff people (engineering) reported to the business team leader as well as to the staff manager (for example, the head of engineering). QC circles were linked to the teams and introduced at the production worker level.

Another organization introduced an elaborate hierarchical system of teams for strategic planning. This system was called the parallel organization. The target population in this program was managers and staff personnel. The parallel organization was a separate organization from the traditional line and staff group. It was a permanent organization. All members belonged to both the traditional line and staff organization and to the parallel organization, and each participant had two bosses. Within the parallel organization, there is a mechanism for generating new strategic problems and a mechanism for auditing the implementation of the plans adopted to deal with these problems.

One of our organizations introduced a variation of a Scanlon Plan—a labor-management productivity plan with plantwide bonuses.

Degrees of Institutionalization. Table 1 summarizes some of our interview data in terms of degrees of institutionalization. Five different organizational forms were introduced into our sample of nine organizations. Autonomous work groups and problem-solving hierarchies were the most common forms, but their specific form varied by organization. Within a given form, such as problem-solving hierarchies, we find organizations producing very different products or services.

The table is also arranged according to the facets of institutionalization. *Knowledge* refers to the degree to which organizational participants understand the proposed organizational form (for example, autonomous work groups) and its requisite behaviors (job switching). *Behavior* refers to the extent to which a behavior is

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Table 1. Degrees of Institutionalization.

Organizational Form	Knowledge	Behavior	Personal Dispositions	Normative Consensus	Value Consensus
1. Autonomous Work Group	very low	none	none	none	none
2. Problem-Solving Hierarchy	very low	very low	very low	none	none
3. Problem-Solving Hierarchy	medium	low	mixed	very low	none
4. Problem-Solving Hierarchy	medium-high	low-medium	mixed	low	none
5. Matrix-Production Business Team	medium-high	low	low	very low	none
6. Problem-Solving Hierarchy	high	medium-high	medium	medium	low
7. Autonomous Work Group	high	moderate	medium	low-medium	none
8. Parallel	high	high	medium-high	medium	none
9. Bonus Productivity	high	high	medium-high	medium-high	low

performed. *Personal disposition* refers to the extent to which people like and privately accept the new behavior. *Normative consensus* refers to the degree to which multiple others view the behavior as appropriate. *Value consensus* indicates the degree of consensus concerning an abstracted concept (for example, autonomy, cooperation) derived from specific behavior included in the other criteria.

We operationalized the criteria by estimating the percentage of people (that is, those we interviewed) in each of the five categories. Because the data do not provide opportunities for refined measurement, we used gross categories—low (0–33 percent), medium (34–66 percent), high (67–100 percent). Also, our judgments are aggregated across behaviors for any site. That is, there is a large number of behaviors included in the form designated as autonomous work groups. A low rating means that less than one third of the people are performing any of the behaviors. A high classification means that most of the people are performing all the behaviors. The only other code used is mixed, and it appears in the personal disposition category. *Mixed* means that, although the new behavior has acquired a certain amount of support, there is also a clearly recognizable opposition to it.

Table 1 is ordered in terms of degrees of institutionalization, with a program of autonomous work groups exhibiting no signs of institutionalization five years after its inception and a bonus productivity plan exhibiting the highest level of institutionalization. Most of the nine organizational forms were introduced at the same time, and all experienced a period of success.

The first significant observation from this array of data is that five of the nine sites exhibit low levels of institutionalization, as measured by the behavior criterion. Only two of the nine exhibit moderate to high levels of institutionalization. These are congruent with other reports (Hinrichs, 1978; Walton, 1980) that it is difficult to maintain organizational change over time.

A second observation is that there is some order among the institutionalization criteria. If knowledge is not present (that is, medium or above), the other categories are labeled low or none. If behavior is not present, the remaining categories are similarly labeled. If behavior is present, the knowledge category is present. If the personal disposition category is not present, the remaining catego-

ries are not present. If personal dispositions are present, so are the preceding categories. Basically, there appears to be some unidimensionality among the criteria, resembling a Guttman scale.

Degrees of Institutionalization and Critical Processes. Table 2 presents the organizational forms arranged by degrees of institutionalization and by the critical processes. The basic theme in our theoretical discussion is that the critical processes have a direct effect on the degrees of institutionalization. The table is not presented for hypothesis testing. Rather, we are looking for trends and gross associations.

Socialization. Socialization refers to the transmission of information to organizational members about the new forms of work behavior. Of critical interest for us is transmission after the new

Table 2. Degrees of Institutionalization by Critical Processes: Socialization.

Organizational Form	Socialization—Initial	Socialization—Retraining Old Members	Socialization—Training New Members
1. Autonomous Work Group	high	limited	low
2. Problem-Solving Hierarchy	high	none	none
3. Problem-Solving Hierarchy	high	none	none
4. Problem-Solving Hierarchy	high	none	none
5. Matrix-Production Business Team	high	none	low
6. Problem-Solving Hierarchy	high	none	none
7. Autonomous Work Group	high	none	medium—indirect
8. Parallel	high	none	medium—indirect
9. Bonus Productivity Teams	high	none	medium—indirect

behaviors are in place. The extent to which organizational members must explain to new participants the rationale for the work behaviors should reinforce the existence (or institutionalization) of these behaviors.

As Table 2 indicates, there were no differences among the organizations in their initial socialization programs. All were relatively extensive, as one would expect. The next question was whether formal training programs were planned over time. The idea behind this measure is that some of the knowledge presented early in the program might decay and some form of retraining might be necessary. All these programs had some form of committee structure meeting over time, which obviously would provide some socialization experiences, but only for a few members. Here we are referring to intentional periodic retraining for *all* organizational participants. In the first autonomous work group, there were plans to provide retraining over time. As we moved into year two of that program, there was a noticeable decline in the number of meetings. The other programs did not have a schedule of retraining activities for existing organizational participants.

Golembiewski and Carrigan (1970) report that retraining can facilitate persistence. In a program designed to change the practices of high-level managers in the sales division of a manufacturing firm, they found that a retraining exercise several months after the program was instituted strengthened the persistence of the program. In a similar vein, Ivancevich (1974) compared Management by Objectives programs in two large manufacturing firms. One firm had a retraining exercise; the other had none. After three years, the program in the former plant exhibited greater persistence. There were, however, some differences in the two plants, which makes it difficult to conclude unequivocally that the retraining caused the difference in persistence.

The next question concerns the socialization of new participants who came into the organization after the program was on line. We did not see that any of the programs offered training to these new members that was comparable to the training when the programs were initiated. The features of the organizational forms might have been mentioned in an orientation meeting, but the intensity of this training was much lower than in the introduction of the program.

Given that all the organizational forms are very complicated in terms of operations, beliefs, and values, it is surprising that these organizations did not pay more attention to socialization of new members—a critical feature of institutionalization. A number of laboratory studies have focused on the transmission of organizational culture to successive generations through the passive socialization of new members. Jacobs and Campbell (1961) showed that extreme judgments of the magnitude of the autokinetic effect (introduced by confederates) could be reiterated through several "generations" of subjects. This was accomplished by placing new subjects, one by one, into groups in which the extreme norm existed. Over time, then, the "socialized" became the "socializers." However, the estimates converged on the natural autokinetic norm over successive generations, and all the experimental groups' estimates equaled those of the control group by the tenth generation. This is similar to the decline over time often observed in programs of organizational change. Jacobs and Campbell infer from this that subjects' announced judgments are averages of tradition and their own judgments. Therefore, a norm that has no basis in reality (that is, no "function") is unlikely to become institutionalized. However, one should also observe that there was no formal socialization procedure for the new participants; this may also be important in understanding the decline.

Weick and Gilfillan (1971) employ a similar but slightly different experimental paradigm, dealing with strategies groups use in a game. Two strategies of equal potential effectiveness were used: one easy and one hard. Groups initially assigned the hard strategy eventually abandoned it in favor of the easy one; groups initially assigned the easy strategy were able to maintain it over successive generations. Weick and Gilfillan call the hard strategy "unwarrantedly arbitrary" and argue that such strategies in general will not become institutionalized. The argument is similar to that of Jacobs and Campbell (1961): that tradition alone will not be sufficient to perpetuate a norm if there are better, that is, more functional, norms available. These findings were echoed in a somewhat more complex experiment by MacNeil and Sherif (1976). We may therefore revise our statement about the necessity for socialization of new members. Socialization mechanisms may not be necessary if the desired behav-

iors are easy, comfortable, and obviously functional from the new participant's perspective. But programs of organizational change often contain elements that go against the grain of existing work cultures. It is in this situation that socialization programs are badly needed but are rarely found. The decline of work innovations and the reversion to more commonly accepted forms of organization as new members are introduced should therefore not be surprising.

Another way to conceptualize training of new members is to determine the extent to which they would be forced to learn about the new organizational form. In the organizations with the highest level of institutionalization (refer to organizational forms 7-9 in the tables), it would be very difficult for a new participant not to learn about the program. In the bonus productivity teams, a monthly bonus meeting is held with all participants. The new participants are forced to be aware of that organizational form. In the parallel organization, most new participants (given a particular job level) have to participate in one of the parallel problem-solving groups. Because these groups are independent and permanent and are supervised by a different person from the one on their line job, it is hard not to learn about the parallel organization. Also, this organization has extensive manuals explaining the functioning of this form, as well as audiovisual presentations that facilitate the training of new members. In the autonomous work group program (organizational form 7), the pay system is designed to force people to learn about the functioning of autonomous work groups. In the other organizations, it is easier to enter the organization without learning about the organizational form. In problem-solving groups, for example, it is unlikely that a new member would participate in one of the groups. Unless the participant conversed with an active participant, learning would not occur.

Commitment. Commitment refers to the binding of individuals to behavioral acts. Higher levels of commitment should enhance the degrees of institutionalization (see Table 3). We divided commitment into three categories. To what extent did the adoption of the new behavior reflect personal choice or an organizational requirement? The more it reflected personal choice, the greater the commitment. The data, not surprisingly, show a greater frequency of personal choices. What is different is that one of the most institu-

Table 3. Degrees of Institutionalization by Critical Processes: Commitment.

Organizational Form	Source	Commitment Opportunities	Target
1. Autonomous Work Group	personal choice, organizational requirement	initially limited, later total	lower
2. Problem-Solving Hierarchy	personal choice	limited	lower
3. Problem-Solving Hierarchy	personal choice	limited	lower
4. Problem-Solving Hierarchy	personal choice	limited	lower
5. Matrix-Production Business Team	personal choice, organizational requirement	total	total
6. Problem-Solving Hierarchy	personal choice	limited	total
7. Autonomous Work Group	personal choice	total	lower
8. Parallel	organizational requirement	total	total
9. Bonus Productivity Teams	personal choice	total	total

tionalized programs are initiated by organizational requirements. The first autonomous work group program demonstrates a more expected trend. The program seemed to grow and develop when personal choices were carried out freely. Later in the program, when organization requirements caused participation, the program began to decline.

We also explored opportunities for commitment, that is, the extent to which an individual had the opportunities to make commitments to the program. Some of the programs created the opportunities for *all* members to participate; others did not. Higher degrees of institutionalization seem to result from total rather than limited opportunities.

If we hold constant the opportunities for commitment, another issue concerns the target of commitment. Organizations varied in terms of whether they tried to get total organizational commitment versus the commitment of a specific group or organizational level. The data seem to indicate that lower levels of institutionalization result from targeting specific groups. Basically, we found that in the first four organizations, most of the focus was on bringing the lower-level participants around to the new organizational culture. Unfortunately, middle and lower-middle managers were either ignored or threatened by the change. Later they introduced counter-implementation strategies (compare Keen, 1981), which worked against institutionalization of the change. Resistance by lower management has been a chronic problem with many QWL programs (Goodman and Lawler, 1977).

Several other studies have noted the impact of commitment on institutionalization. For example, Ivancevich (1972) attributes the failure of one Management by Objectives program to a lack of commitment by top management. Walton (1980) notes the high level of commitment in several successful programs of work innovation. Research on commitment is not limited to organizational studies. Kiesler (1971) and his associates have performed several experiments on commitment that bear directly on institutionalization. In one set of experiments, it was demonstrated that attacking someone's beliefs will have differential effects, depending on the strength of the commitment. If someone is weakly committed to a belief, attacking the belief will make the commitment weaker. How-

ever, individuals who are strongly committed will become even stronger when attacked. New individuals in the work group may represent an attack on the group's beliefs because they have not yet been socialized. If group members are only weakly committed to the change program, this mild attack may further weaken their commitment. However, groups that are fairly strongly committed will become even stronger when new members are added. This has obvious policy implications for the timing of the entry of new members, as well as for the choice of socialization agents.

Reward System. The type of reward system can affect the degree of institutionalization. Our first subcategory concerns whether the rewards are primarily intrinsic or extrinsic. Although there may be some controversy about classifying rewards this way, we were basically interested in whether rewards that were internally mediated, externally mediated, or some combination of these were related to the degrees of institutionalization. Table 4 seems to indicate that organizational forms that mixed both internally and externally mediated rewards exhibited higher levels of institutionalization. This finding is not so obvious if you examine the context in which most of these plans were introduced. The major themes were to provide workers more autonomy, responsibility, control over their environment, challenge, and feelings of accomplishment—all internally mediated rewards. The assumption was that these rewards would be sufficient to drive any new organizational form. The information in Table 4 questions that assumption. Goodman (1979) and Walton (1978) also question the assumption that internally mediated rewards are sufficient to facilitate institutionalization. In both of the programs studied by these authors, the lack of extrinsic rewards seriously hampered the process. The rationale for both sets of rewards may be as follows: I will increase my effort and performance quality with new opportunities for accomplishment and challenge. Over time, the organization should benefit from my new contributions. Given a general contributions inducements framework, I might expect some additional inducements to compensate for my contributions.

A second issue concerns the contingency between behavior and rewards. That is, if a person adopts one of the requisite behaviors (attending group meetings, solving problems, assuming leader-

Table 4. Degrees of Institutionalization by Critical Processes: Reward Allocation.

Organizational Form	Types	Reward Allocation		Problems of Inequity
		Contingency	Behavior—Reward	
1. Autonomous Work Group	primarily intrinsic		medium	yes
2. Problem-Solving Hierarchy	primarily intrinsic		medium	no
3. Problem-Solving Hierarchy	primarily intrinsic		medium	yes
4. Problem-Solving Hierarchy	primarily intrinsic		medium	no
5. Matrix-Production Business Team	primarily intrinsic		medium	no
6. Problem-Solving Hierarchy	primarily intrinsic		medium	no
7. Autonomous Work Group	intrinsic/extrinsic		high	no
8. Parallel	intrinsic/extrinsic		high	no
9. Bonus Productivity Teams	intrinsic/extrinsic		high	no

ship roles), to what extent is that behavior linked with a reward? Although our interview data are not as robust in this area, some observations can be made. First, all nine programs have a common set of internally mediated rewards—autonomy, responsibility, challenge, variety, accomplishment. Second, some of these rewards are more related to participating in a program than to producing (see March and Simon, 1958). That is, the amounts of autonomy do not covary with the amounts of problem-solving behavior, job switching, and so forth. Some internally mediated rewards (for example, accomplishment) do covary with successful problem solving or job switching. The point is that there is not as high an across-the-board contingency between behaviors and the internally mediated rewards found in most of these organizational forms as one might expect. Hence the rating of medium for this column.

The extrinsic rewards, particularly pay, are more closely linked to the requisite behaviors. In the bonus productivity teams plan (organizational form 9), production behaviors such as effort, coordination, and suggestion making are linked to monthly bonuses that serve monetary and recognition functions. In the autonomous work group (organizational form 7), both group and production behaviors are clearly linked to a pay system. Therefore, it seems that there are closer contingencies in the last three organizations. This occurs not because extrinsic rewards are more prevalent, but because there was a conscious attempt to link them to program behaviors. The importance of this link between performance and outcomes has been a dominant theme in the literature on motivation (Vroom, 1964) and effectiveness of pay systems (Lawler, 1971). In general, the stronger and more consistent this link, the more adherence there will be to the behaviors in question.

A final concern under reward allocation processes is the potential for problems of inequity. In a change program with the scope of those we are studying, new behaviors are undertaken, new skills are acquired, and new rewards are provided. It is therefore extremely difficult for an organization to maintain the delicate balance that marks an equitable reward system. Inequity may be perceived among subsystems if one group has started to accumulate new rewards unavailable to other groups. It may also occur within a given subsystem as new and inequitable patterns of reward allocation be-

no
no

high
high

autonomous
intrinsic/extrinsic

to Bonus Productivity
Teams

come obvious to those working closely together. In the present study, we noted the occurrence of problems of inequity (Table 4). These problems were found in only two of the sites, neither of which exhibited very high levels of institutionalization.

Results of other studies have shown that new programs often become complicated by questions of equity. For example, Locke, Sirota, and Wolfson (1976) report that a job-enrichment program in a government agency did not become institutionalized, mainly because the workers were not compensated financially for the new skills they had learned. They had never been promised more money, but the fact that they were accomplishing more for the same pay was perceived as inequitable. Goodman (1979) reports similar problems in a program to develop autonomous work groups in a coal mine. Part of the program involved job switching, whereby everyone would eventually learn all the jobs in the crew. The problem was that the entire crew was to be paid at the same (higher) rate, which originally was paid only to certain crew members. Because it had taken years for some of the men to attain this rate, they felt it inequitable that the other crew members should come upon it so easily. This led to resistance to the program.

The third issue we considered is whether any of the programs had developed mechanisms to deal with the "novelty" problem. In the theoretical discussion, we examined the diminishing value of rewards over time. When a program starts, the new rewards have a high novelty and attractiveness. But as one adapts to the level of these rewards, they may be perceived as less valuable (Lawler, 1971). We wondered whether any of our programs had mechanisms to revise the type and schedule of reward. None of our sites used such a mechanism. Walton (1980) shows how adaptation to reward levels can lead to increasing perceptions of inequity; so in the absence of this type of mechanism, perceptions of inequity are increasingly likely over time.

Diffusion. Diffusion refers to the spread of an innovation from one system to another. The significance of diffusion is that it helps lock in behavior. As other systems perform the new behavior, it legitimates the performance of that behavior (that is, enhances normative consensus) in the focal system. If the new behavior is performed in isolation with respect to other adjacent systems, coun-

terimplementation strategies may be evoked in these other systems against the new behavior.

In our analysis, we distinguished between diffusion within the target system and diffusion external to that system. *Within* target diffusion means that the change was introduced into one section of the target system and would be spread throughout the target system. Diffusion external to the target system refers to spreading the organizational form to other independent organizational units that have some formal connection to the focal unit. For example, the organization with the bonus productivity plan is one of nine plants in a common division. Diffusion in this context refers to whether those eight organizational units adopt the bonus productivity plan or some variant.

Table 5 shows our rating of the extent of diffusion. The label NR (not relevant) means that no diffusion would be expected. If an organizational form were introduced into the whole target system, there would be no room for diffusion. If an organization were not linked to other external units, there would be no room for external diffusion.

For *within* target diffusion, the data are difficult to interpret because of the frequency of the NR. Remember, however, that the NR in this context means that, in those organizations, there has been a total system intervention. In cases one through four, there has been an initial partial system intervention with only low to medium levels of success in further diffusing the new forms of work organization. Also, in these organizations there were either negative attitudes displayed toward the new behaviors by members of the "out" group or counterimplementation strategies directed against the "in" groups performing the new behaviors. It would seem that in partial interventions, failure to diffuse may lead to a decrease in institutionalization. Goodman (1979) has demonstrated this. In this study, when the intervention failed to diffuse beyond the original target group, it was perceived as inappropriate and failed to become institutionalized.

In the column on diffusion to external systems, there are no clear trends. The most- and least-institutionalized organizations conform to our expectation that greater diffusion would facilitate

Table 5. Degrees of Institutionalization and Diffusion.

Organizational Form	Within Target System	External Target System	Sensing Follow-Up
1. Autonomous Work Group	low	none	none
2. Problem-Solving Hierarchy	low	NR	none
3. Problem-Solving Hierarchy	medium	low-medium	none
4. Problem-Solving Hierarchy	medium	NR	none
5. Matrix-Production Business Team	NR	none	none
6. Problem-Solving Hierarchy	NR	low-medium	none
7. Autonomous Work Group	NR	none	low-medium
8. Parallel	NR	low	high
9. Bonus Productivity Teams	NR	high	high

institutionalization, but the data on other organizational forms are too varied.

Sensing and Recalibration. Sensing and recalibration refer to the processes of determining whether the new forms of work behavior are performed and generating corrective actions to ensure that the behaviors are in place. A striking but not unusual finding gathered during our data collection was that there often was a wide discrepancy between the behaviors intended by the specific organizational form and the actual behaviors. Most of the organizational forms identified in Table 5 did not have sensing or feedback mechanisms to examine the performance of the new forms of work behavior. Only in organizations nine and ten do we find both auditing mechanisms and specific mechanisms to recalibrate the change. Walton (1980) claims, on the basis of four case studies of innovation, that the absence of such mechanisms is a major impediment to the process of institutionalization.

Structure of Change. In our theoretical discussion, we identified two antecedent variables that affect the degree of institutionalization through their impact on the process variables: the structure of change and organizational characteristics. The structure of change refers to some of the unique characteristics of the change activities. Table 6 presents the organizational forms by structural characteristics of the change program.

The goals for each program were analyzed in terms of whether they had a broad or a specific focus. We speculated that a broad, multiple set of goals would complicate the process of socialization and reward allocation. A problem in any analysis of goals is whose perspective is most valid because different perspectives or constituencies provide different goal statements. We took the point of view of the dominant coalition in determining the set of goals for analysis. Another problem in measuring goals is whether to accept stated goals or operational goals. We accepted the publicly stated goals that generally appeared in some written document. The data in Table 6 seem to indicate that change programs with more specific goals exhibit higher levels of institutionalization. Specificity means that there is greater attention to fewer goals and/or the goals that are more easily operationalized. In the case of the bonus productivity teams, the principal focus is on increasing productivity. The bonus

Table 6. Degrees of Institutionalization and Diffusion.

<i>Organizational Form</i>	<i>Goals</i>	<i>Change Program</i>	<i>Initial Target</i>	<i>Consultant</i>	<i>Sponsor</i>	<i>Internal Support System</i>
1. Autonomous Work Group	diffuse	medium programmed	subsystem	external	present	none
2. Problem-Solving Hierarchy	diffuse	medium	subsystem	external	absent	none
3. Problem-Solving Hierarchy	diffuse	medium	subsystem	external	absent	none
4. Problem-Solving Hierarchy	diffuse	medium	subsystem	external	absent	yes
5. Matrix-Production Business Team	specific	low-medium	total	external-T	absent	yes
6. Problem-Solving Hierarchy	diffuse	medium-high	total	external-T	present	none
7. Autonomous Work Group	specific	high	total	internal	present	yes
8. Parallel	specific	high	total	internal-external-T	present	yes
9. Bonus Productivity Teams	specific	high	total	external-T	present	none

formula provides a monthly account of whether that goal was achieved. The diffuse label was attached to programs with (1) multiple primary goals (one program had five goals, which included measuring productivity, safety, job skills) and (2) less operational goals, such as personal growth, individualization.

We looked at other characteristics of goals, such as whether they were written, and found no relationships with institutionalization. Another characteristic was whether goals were common or complementary (Goodman, 1979). Common goals are congruent with the interests of all participants (for example, safety). Complementary goals are trade-off goals; one party gets one goal (for example, increased productivity) and the other gets a different goal (increased income). We found no relationship between institutionalization and the common/complementary distinction.

The next factor reflects the extent to which the mechanisms of the change are programmed. By *mechanism* we refer to structural features of the organizational form. The parallel organization is composed of a hierarchy of groups. An autonomous work group is defined by the set of self-governing decisions made by that group. In highly programmed organizational forms (for example, the parallel), the design, composition, meeting time, intergroup relationships, and procedures for initiating a meeting would appear in detail and in written documents. The information in Table 6 indicates that programs that are more highly programmed are also more institutionalized.

The third factor concerns whether the target of change was the total system or a subsystem. The problem with subsystem change is that it is more susceptible to counterimplementation activities and hence lower levels of institutionalization. Table 6 indicates that organizational forms with total system interventions appear to persist longer than those with subsystem intervention. In organizations one through four, there were counterimplementation strategies initiated against the proposed new forms of work organization.

We also looked at the role of the consultant in terms of whether change was initiated by external or internal consultants. We were also interested in whether the external consultant created a long- or short-term relationship with the organization. In the latter case, the role was to provide expertise on organizational forms, to

none
present
external-T
total
high
specific
Programs

train organization participants to manage the change, and to legitimate the process via expertise. Most of the organizations used external consultants. Two of the three most institutionalized forms used an internal consultant. Those organizations using a short-term external consultant exhibited higher levels of institutionalization. In organizations using external consultants over a long time period, we found little development of an internal capability for managing change; so when the consultant left the organization, there were major problems in managing change.

Another factor that appears to affect the degree of institutionalization is the presence of a sponsor. The sponsor's function is to initiate, legitimate, and allocate resources to the change. If the sponsor leaves the organization, these functions will no longer be performed, and processes such as commitment and reward allocation will be altered. It appears (Table 6) that the initial sponsor is still present in organizations six through nine, but the initial sponsor has left in organizations with lower levels of institutionalization.

The withdrawal of sponsorship can follow from common organizational practices rather than be inherent to the change project. For example, Crockett (1977) reports a major organizational intervention in the State Department in which substantial changes were observed to persist for years. However, when the project initiator, a political appointee, left office, the organization reverted to its traditional form. The new administrator was not sympathetic to the values and structure of the change program. As program support and legitimacy decreased, the degree of institutionalization declined. Similar effects were reported by Walton (1978) when the sponsors of the famous Topeka Experiment left the organization, and by Levine (1980) when an innovative college president left after instituting a new structure for the school. In some cases, the sponsor left temporarily (Frank and Hackman, 1975); in other cases (Miller, 1975; Walton, 1975), the sponsors focused attention on other organizational matters. A study by Schefflen, Lawler, and Hackman (1971) showed that sometimes middle management will withdraw support from a program because they were not involved in planning for it. This finding is potentially of great importance because many organizational innovations are planned at very high levels of the organization and implemented at the lowest levels. In all cases, however, the persistence of the new structures declined.

The last factor was whether the organization had introduced an internal support system to facilitate the change process. The support system was generally identified by the role of a facilitator who worked directly with the organizational participants included in the change and who could move across different organizational levels to gain commitment, resolve conflicts, and legitimate the change activities. The findings on this factor seem inconclusive.

Organizational Characteristics. There is a set of organizational characteristics that can moderate the impact of the change processes. That is, there can be an interaction between the effects of the structure of change and the effects of the organizational characteristics on the change processes. The organizational characteristics are given and they exist prior to the change activity.

The first factor concerns the congruency between the structure of change and the existing management philosophy and structure. Organization one had a very authoritarian philosophy and clear hierarchical structure. The proposed change moved the organization toward a more democratic mode and authority was pushed down to lower organizational levels. We label this condition as a low congruency. Change was introduced in this organization and did persist with some degree of success over a three-year period, but the management philosophy and organizational structure did not change. We hypothesize that over time this discrepancy increased the forces of deinstitutionalization. In Table 7 we see that greater levels of congruency may be related to greater levels of institutionalization.

Walton's (1980) data show that in some change efforts there is a gap between the requirement inherent in the structural features of the change and the employees' skills and values. The lower the congruency (or greater the gap), the lower the levels of institutionalization. Unfortunately, we cannot discern any trends in our data because of the lack of variability in the congruency variable.

We did gather some information from one of our companies that had introduced an autonomous work group into a new organization. The employees were just in the process of learning their basic job skills. The rewards for doing both self-governing activities and job activities far exceeded the employees' capabilities, and the change failed. The gap in this instance worked against the long-run viability of the program. Levine (1980) describes a set of innovations attempted at a state university. Some of the innovations were more

Table 7. Organizational Characteristics.

Organizational Forms	Congruency			Stability	
	Management Philosophy Structure	Employment Values Skills	Environment	Technology	Union
1. Autonomous Work Group	low	high	stable	stable	yes
2. Problem-Solving Hierarchy	low-medium	medium-high	stable	stable	yes
3. Problem-Solving Hierarchy	low-medium	high	unstable	stable	yes
4. Problem-Solving Hierarchy	low-medium	medium-high	stable	stable	yes
5. Matrix Production Business Team	high	high	unstable	stable	yes
6. Problem-Solving Hierarchy	high	high	stable	stable	yes
7. Autonomous Work Group	high	medium	stable	stable	no
8. Parallel	high	stable	stable	no	no
9. Bonus Productivity Teams	high	high	stable	moderately stable	no

congruent with organizational norms and values than others. Over time, those innovations that were congruent were more likely to persist than those that were incongruent. Similar conclusions were drawn by Warwick (1975) and Crockett (1977) concerning a major organizational change undertaken in the State Department. The new structure favored the taking of initiative by lower-level officials, which was incongruent with both the reward system and received wisdom about how to be successful at the State Department. Not surprisingly, the change did not last. Finally, Miller (1975) showed that a change program must be congruent with cultural norms and values, as well as with those peculiar to the organization. An organizational innovation in several Indian weaving mills was hampered because it did not provide for the workers' need for recognition by superiors, which is strong in the Indian culture.

Another issue that appears to affect the level of institutionalization concerns the stability or variability in the environment. In an earlier literature review (Goodman, Bazerman, and Conlon, 1979), evidence was cited that high variability without some boundary *buffer mechanism* works against institutionalization. In our data there were only two instances of instability in the environment. In these cases there was a major decrease in demand for the organization's products, which led to curtailments in the work force. These changes in the work force in turn changed the composition of many of the groups that were an integral part of the change mechanism. Because these economic changes were not buffered, they decreased the effective function of the groups, which lowered levels of institutionalization.

We thought that variations or instability in technology would have a similar effect. However, there were few changes in technology. In case nine, there were some technological changes, but these were easily incorporated into the organization without affecting the change activities of lower levels of institutionalization.

The next factor concerns whether the organization was unionized. We have argued elsewhere (Goodman, 1979, 1980) that there may be some inherent conflict between an organizational form that is based on labor-management cooperation and a labor-management system based on an adversary relationship. This inherent conflict may work against the long-run viability of the new organiza-

tional form. The data do indicate this type of relationship; firms whose programs were most institutionalized were nonunion. However, it would be a mistake to infer from the data that union versus nonunion is a principal cause of institutionalization. There are too many other independent variables, which we have presented to the reader, that affect institutionalization. One cannot assert that the institutionalization of change will not occur in a union-management system. All we have argued for, theoretically, is that it will be more difficult.

There are other organizational characteristics, such as size, age, and location, that might be included in this table. They were excluded because we did not identify theoretically, or through a literature review, how the variables would moderate the processes in Table 7.

Conclusion

We have presented a definition, a conceptual procedure to analyze degrees of institutionalization, and a framework to explain or predict the level of degrees of institutionalization. Now that an analysis is completed, it may be useful to identify ways in which this analysis differs from other discussions of institutionalization (compare Berger and Luckman, 1966; Zucker, 1977; and Walton, 1980).

Conceptualization of Degrees of Institutionalization. Institutionalization is not an all-or-nothing phenomenon. More likely, we find degrees of institutionalization in any social context. We have proposed five criteria to represent the degree of institutionalization: cognitive consensus, common behavior, common preferences or private acceptance, normative consensus, and value consensus. The criteria are not simply a list of five isolated factors. Rather, we have argued that they are interrelated and developmentally may appear as a unidimensional structure. That is, cognitive consensus should precede the appearance of common behaviors, which should precede a common set of preferences toward those behaviors, and so forth. Similarly, if value consensus appears, the other four criteria should be operating with regard to a particular act.

Operational Procedure for Measuring Degrees of Institutionalization. Following a conceptual identification of criteria for insti-

tutionalization, we have suggested that it is possible to represent this concept empirically in an organizational context. The major problem we faced in going into the field was to measure the degree of institutionalization in the different settings. Although this chapter does not represent a psychometric guide to resolving this operational issue, it did appear possible to measure the level of institutionalization in the nine organizations. After defining the appropriate social system, the task is to develop questions to measure beliefs, behavior, and preferences with respect to a given act and then to ascertain the level of normative and value consensus. Questionnaires and interviews represent two methods; observation analysis could be used for measures of behavior, normative consensus, and value consensus. The point is not to suggest that the task of operationalizing degrees of institutionalization is easy. Indeed, there are tough measurement problems, to which we have offered some solutions (pp. 229-235).

A Precise Framework. In reviewing the literature on institutionalization, it is easy to find factors that affect institutionalization. Some studies suggest the degree of sponsorship, the type of reward system, whether the organization is unionized, and so forth. One can generate a long list of factors. Our position has been that there are five critical processes: socialization, commitment, reward allocation, diffusion, and sensing and recalibration. These processes are the *main* predictors of the degree of institutionalization. We have acknowledged other factors, such as characteristics of the change and characteristics of the organization, but these variables are important only as they moderate the processes.

Some Hypotheses. This was a hypothesis-generating rather than hypothesis-testing chapter. Each of the tables represents possible hypotheses. Some of the tables identify some fairly clear relationships. For example, high levels of institutionalization are associated with training new members, opportunities for commitment, types of rewards, and behavior-reward contingency. In other tables, the relationships are mixed. In either set, these represent possible hypotheses for testing. If we count across tables, some eighteen hypotheses are posed.

Development of Social Facts. An important part of an analysis concerns how acts become social facts, that is, how behaviors

become part of social structure. We have adopted a developmental perspective that begins with the individual and moves to a structural level of analysis. The novel aspect of our approach is integrating several diverse learning mechanisms, such as social comparison, social thresholds, attributions, and lateral and vertical generalization (see the Appendix to this chapter).

The problem of maintaining change is itself persistent problem. Our data painted a pessimistic picture. Change had been successfully introduced; some benefits had appeared; but over time the majority of the programs had become deinstitutionalized. These findings may represent a unique sample, but others (for example, Mirvis and Berg, 1977; Walton, 1980) have reported similar findings in different settings with different types of change. Our hunch is that difficulty in maintaining change will remain a fairly persistent phenomenon. We hope that the ideas in this chapter will provide some guidance to those conducting research on change as well as to those planning and implementing it.

Appendix

This appendix details the processes by which behaviors become institutionalized by examining different phases of change at different levels of analysis.

There are many ways to characterize phases of change. We assume there will be some type of introduction, followed by a temporary adoption of the proposed behavior. Over time the behavior will become established and routinized. The next phase may be one of maintenance or revitalization, or one of decline. We propose these phases merely as a way to organize this discussion; they are not independent entities with one ending and the other beginning or some closed cycle. The phases can occur at different points. Decline might follow adoption or occur during the revitalization phase.

Level of analysis is another issue that will organize this analysis. We believe that the development of institutionalized behavior must be understood at the individual and collective levels. According to our definition, an institutionalized act is a collective phenomenon. However, to understand the development and decline of this act, it is necessary to understand why individuals adopt new work

behaviors because these individual adoptions represent the "raw material" for the institutionalization process.

Individual Level of Analysis. The individual analysis begins as a new behavior is introduced. The focus is on a single individual operating in an isolated context. We will trace the individual through the different phases of change. In each phase we will try to link the relevant theoretical processes to the five facets of institutionalization.

The critical behaviors acquired during the introduction are the beliefs about the new behavior. The critical process is socialization, which provides information for these beliefs. From other literature (compare Goodman, 1979; Oskamp, 1977) we know that (1) the credibility and trustworthiness of the communicator, (2) the content of the communication (for example, one-sided, two-sided), and (3) the relationship between the content and the receiver's prior experiences or current attitudes and beliefs all bear on whether the information will be received, modified, or rejected. These new beliefs are important because they may determine whether the new behavior will be adopted (Goodman and Moore, 1970).

The *adoption* decision concerns whether the individual will perform the new behavior. This decision is based on three things.

1. Beliefs concerning the perceived ability to perform the new behavior. In a study of a Scanlon Plan installation, Goodman and Moore (1976) reported that people who felt capable of performing a new behavior did so and others who did not feel capable did not.
2. The perceived relationship between new behavior and the resultant outcomes. If an individual does not see rewards flowing from the new behavior, it is unlikely it will be adopted.
3. The attractiveness of the rewards. A variety of rewards may be promised. Extrinsic rewards, those mediated through some external source, are probably the dominant reward in the adoption decision. Intrinsic rewards may be used, but their effect is probably weaker because it is harder to assign valences to expected internally mediated rewards (for example, feelings of accomplishment) than to expected amounts of money.

Forms of identification (Kelman, 1958) can also be used in the adoption decision because people may adopt a behavior to maintain a satisfactory relationship with the person requesting the behavior.

There are many complexities in this decision process, but because it is not central to our theoretical framework, it will not be elaborated. The basic idea is that the adoption decision (a behavior) follows from beliefs developed from the socialization processes.

The adoption decision is based on expectation of rewards; the *continuation* decision is based on the prior commitment process and the receipt of rewards.

If there is congruence between expected and actual outcomes, the adopted behavior should continue. The expectation level is dynamic and adjusts over time. For example, if actual outcomes become less than the expected rewards, but this discrepancy occurs slowly, predictably, and equitably, the expectation level should adjust, and the behavior should persist. Adjustment upwards should follow a similar pattern.

Another critical process in this phase is commitment. The social context in which the adoption decision is made is as important as the decision itself. The level of commitment is highest when the adopted behavior is (1) selected freely (not because it is an organizational requirement), (2) explicit (that is, not easily deniable), and (3) publicly known (Salancik, 1977). High commitment leads to the stability of the behavior and resistance to change in that behavior. In this phase, then, reward allocation and commitment are the critical processes. Performance of the behavior and preference of that behavior are the relevant facets. As the individual continues to perform the behavior over time, affective orientations will probably be developed toward that behavior. Similarly, the greater the freedom in selecting the behavior, the more likely that private beliefs will be congruent with that behavior.

The decision to continue, as compared with the decision to adopt, occurs at a less conscious level. The decision to adopt, given limits on rationality, requires some explicit examination of the benefits and costs of the new behavior. The continuation of the behavior occurs by default. If high commitment is induced in the adoption decision, the behavior should continue. If actual outcomes are in line with expected outcomes, no explicit reevaluation of the

adoption decision occurs. Indeed, over time the behavior becomes routinized, that is, performed with a low level of attention. The advantages of routinization are that it reduces the costs of decision making and provides opportunities for considering other decisions.

Over time there may be a *decline* in the perceived value of the rewards that sustain the new behaviors. This diminishing utility may vary the type of rewards (Alderfer, 1972; Hall, 1976). To *maintain* (or revitalize) the cognitive behavior and/or preferences, new processes must be introduced. First, resocialization of organizational participants may strengthen earlier beliefs or preferences and focus attention on new outcomes. Second, recommitment processes may be introduced to strengthen cognitions, behaviors, or preferences. For example, in some programs workers vote annually to reaffirm their commitment (Moore and Ross, 1978). The third alternative may be to revise the reward system to provide different types or schedules of rewards. There is a tendency to think of reward systems as fixed rather than as a mechanism in need of constant revision. New rewards may strengthen behaviors and preferences.

This brief discussion at the *individual level of analysis* is intended to highlight (1) the role of the individual in the institutionalization of change and (2) the link between some of the critical processes and facets of institutionalization. The discussion, however, is somewhat artificial in that it treats the individual in isolation. (It is probably more accurate in depicting so-called "early adopters," who adopt the behavior before strong norms and values concerning it have developed.)

Collective Levels of Analysis. At the collective level we want to explain the development of degrees of institutionalization. Our definition requires that institutionalization be examined in a collective context where multiple individuals are objects of change. How does an act become institutionalized? What enhances the level of institutionalization? What contributes to deinstitutionalization? The facets of collective knowledge, behavior, preferences, normative consensus, and value consensus are the objects to be explained. The processes are the explanatory variables.

Introduction and Adoption Phases. The introduction and adoption phases and the corresponding processes are almost identical to those discussed at the individual level of analysis. One differ-

ence is that the socialization and commitment processes are directed to collections of individuals rather than to one person. Also, the social context of most planned organizational change ensures that individuals will be aware that they are objects of the same socialization and commitment processes. The products from these first two phases should be common knowledge of the requisite behaviors and common adoption, at least on a trial basis, of the proposed new form of work behavior. Of course, we would expect individual variation in both the acceptance of the knowledge and performance. We acknowledge the importance of the literature about resistance to change and the effect of such resistance on any adoption decision. But our interest is in explaining degrees of institutionalization, and this requires that the behavior be adopted and initially persist over time.

Continuation. The critical development of an institutionalized act occurs in the continuation phase. Our setting for this analysis is some people with common knowledge about a new form of work behavior and a smaller percentage of people who have adopted the behavior. The question is How does the new form of work behavior become institutionalized? The explanation is based on a set of socialization or learning mechanisms that affect common beliefs, behaviors, and preferences as well as *normative and value consensus*. (Contrast this with the individual level of analysis. At the individual level of analysis, reward allocation and commitment were the major processes; beliefs, behavior, and preferences were the major facets.)

The first mechanism is *social comparison*. Much of the current social comparison literature (Goodman, 1977) focuses on how people make evaluations of outcomes (for example, pay). That is, information about others' input/outcome ratio permits the evaluation of the focal person's ratio. The more general use of social comparison processes has been to validate the social reality of beliefs. That is, people validate their own beliefs by comparing their beliefs with relevant beliefs of others.

The availability of information on others' behavior is an important way to confirm one's beliefs about the costs and benefits of a new form of work behavior. Goodman and Moore (1976) have reported that, in an installation of a Scanlon Plan, the availability of information about others may change people's belief about their

ability to make suggestions, their belief about behavior-reward contingencies, and hence their behavior. In another context, for those people who have adopted the behavior, the availability of information can confirm existing beliefs and ensure the continuation of the behavior.

The effect of social comparison processes on confirming or changing beliefs, behavior, or preferences occurs at the individual level. Because we are describing the effect of social context on individual behavior, the process of institutionalization has not begun.

The second mechanism is *social threshold*. Granovetter (1978, p. 1422) postulates that a threshold is "that point where the perceived benefits to an individual of [joining some collective behavior] exceed the perceived costs." The threshold is conceptualized in terms of the percentage of people in a group performing the behavior. As the percentage changes, so do the benefits and costs, until the threshold is eventually passed. Granovetter uses this concept as a general explanation for why people engage in collective behavior.

Our use of the threshold idea is limited to cases in which it explains the amount of costs associated with not performing a new form of work behavior. Consider the following example: A new form of work behavior, "X," is introduced into an organization. Ten percent of the work group adopts the behavior. Some of the nonperformers observe the performers, modify their beliefs, and adopt behavior "X." If this process continues, the percentage of performers should increase. The threshold concept can come into play when the majority of people are engaging in the behavior and the nonperformers are becoming more visible. Increased visibility of nonperformance increases the probability of receiving some form of punishment. As the amount of participation in the new behavior increases, so will the costs of nonperformance. The relationship is not linear; only at rather high levels of participation (or visibility of nonperformance) will the costs appear. The threshold idea does not explain levels of institutionalization. Rather, it explains at the collective level how social forces bear on individual beliefs, behavior, and perhaps, indirectly, preferences. Both the social comparison and threshold processes are necessary for the development of institutionalized behavior.

The third mechanism is *attribution about appropriateness*. As individuals become aware of others performing the new work behavior, it is reasonable to expect some attributional processes will be generated to explain why multiple others' behavior is evoked. Our focus is not on a single other's performance, because we discussed that under the social comparison processes and made inferences about the individual's cost and benefits assessments. In this context, we are interested in the attributions about collective behavior. Why do multiple others perform the new behavior? An attribution about appropriateness is derived from the following observations: I am performing the behavior. I am aware that others are performing that behavior. Others are aware that other people are performing the behavior. The behavior appears predictable and persistent. I like performing the behavior. Others probably perform the behavior because they also like it and because it is appropriate.

One attribution about this collective behavior is that it persists because the participant feels it is appropriate. Social psychological research (Jones and others, 1972) has shown that individuals generally attribute the causes of others' behavior to internal or dispositional characteristics of those others but often attribute their own behavior to forces in the environment. It is therefore not unreasonable to believe that, when individuals see others performing behaviors consistent with the change program, they will assume that others like the behaviors and/or find them appropriate. Their own behavior, however, may well be attributed to group norms. The target of this attribution process then is the development of normative consensus.

The fourth mechanism is *lateral generalization*. Organizations are collections of norms, which represent rules or statements about appropriate behavior. Assume that a new work behavior that appears similar (and congruent) with an existing norm is introduced. Following the work of Breer and Locke (1965), we expect the "appropriate" label attached to the normative behavior to generalize to the new work behavior, assuming that there is common knowledge of the new work behavior, that people have adopted it, that they privately accept the behavior, and that they are aware of others' performance of that behavior. Consider the following example: There is a work group that embraces the norm of intragroup coop-

eration. Assume that this group has little interaction with other groups. As planned organizational change is introduced to bring about intergroup cooperation, the lateral generalization process from intra- to intergroup cooperation should facilitate the institutionalization of the latter form of cooperation. Lateral generalization, then, contributes to the degrees of institutionalization by creating some level of normative consensus.

The fifth mechanism is *vertical generalization*. The Breer and Locke (1965) theory of attitude and values argues that behavior precedes attitudes and values. The individual is faced with a task. Through trial and error, the instrumental task behavior (say cooperation) is identified and thus a cognition about this behavior (or knowledge, in our terms) is formed. As similar tasks are presented, the individual may generalize laterally and try the cooperative behavior in the new task. If the behavior "works" over a variety of tasks, Breer and Locke argue that a vertical generalization process will be evoked that would move from "cooperation works" (cognition) to "I prefer or like cooperative behavior" (personal preference) to "cooperation is good; people ought to cooperate" (a value). In the context of institutionalization, if there are select acts that exhibit some level of normative consensus and these acts represent a generalized value, then we would hypothesize, through a process of vertical generalization, that this value would be created. To the extent to which others experience this process and communicate with each other about it, some degree of value consensus will be developed.

The sixth mechanism is *communication and persuasion*. The effects of the five mechanisms will be augmented as system members communicate with each other about beliefs, behaviors, preferences, norms, and values. Until now we have treated the first five mechanisms in a passive context. However, the power of group communication, particularly in the context of a cohesive group, has been well documented (Kiesler and Kiesler, 1969) as a means of developing beliefs, behaviors, preferences, norms, and values.

Maintenance or Decline. Given some degree of institutionalization, the next question concerns what affects its maintenance (or growth) or decline. The independent variables that bear on this question are the processes of socialization, commitment, rewards,

diffusion, and sensing and correcting. We discussed the impact of these processes on adopters and nonadopters in the chapter.

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